Additions to the Pteridophyte Flora of the Great Plains

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Recent herbarium studies made while preparing manuscript for the forthcoming manual of the Great Plains flora have led to the discovery of several specimens representing new state records or significant range extensions apparently overlooked by Petrik-Ott in "The Pteridophytes of Kansas, Nebraska, South Dakota and North Dakota" (Beih. Nova Hedwigia 61:1–332. 1979).

Botrychium Iunaria (L.) Swartz var. Iunaria.—This taxon has been reported previously for the Great Plains from North Dakota by Petrik-Ott (1979, p. 37); however, that specimen is B. minganense Vict. The South Dakota collection

represents a southern range extension for this circumboreal species.

SOUTH DAKOTA: Lawrence County: Northern Black Hills: Old Balmoral Mine, NW from Crown Hill, shrubby glade on plateau at old mine, 6100 ft alt., June 1930, Mrs. F. L. Bennett s.n. (BHSC).

Botrychium lunaria var. onondagense (Underw.) House.—This plant previously was known from scattered localities in the northwestern and northeastern United States.

NORTH DAKOTA: Burke County: 12 mi SE of Lignite, N-exposed wooded ravine, 11 June 1971, G. D. Hegstad 7855 (NDA).

Botrychium matricariifolium A. Braun.—Petrik-Ott (1979, p. 294) stated that she had seen no collections of this species from South Dakota, and so she excluded it from the Great Plains flora. In 1978 I visited the U.S. National Herbarium and found the specimen cited by Clausen (Mem. Torrey Bot. Club 19:87. 1938) to be determined correctly. This was verified by Dr. David Lellinger (pers. comm., 1980), and so B. matricariifolium must remain a part of the Great Plains flora.

SOUTH DAKOTA: Custer County: Black Hills: Custer, 5500 ft alt., 15 Aug 1892, P. A. Rydberg

1186 (US).

Botrychium minganense Vict.—Petrik-Ott (1979, pp. 34–36) annotated, described, and illustrated this specimen as typical *B. lunaria*. Of the five plants on the cited sheet, two are immature. The remaining three are typical *B. minganense*; they have distinctly pinnatifid or pinnate lower pinnae, with only the uppermost pinnae flabellate. This determination was kindly verified by Dr. Warren Wagner, Jr. (pers. comm., 1979). The collection represents a slight southern range extension since the species previously was known from Labrador west to Alaska and south to Michigan, Minnesota, Colorado, Nevada, and California.

NORTH DAKOTA: McHenry County: Towner, sandy prairie, 11 June 1955, O. A. Stevens 1530

(NDA).

Ophioglossum vulgatum var. pseudopodum (Blake) Farw.—This specimen was first reported as O. vulgatum L. by Clausen (1938, p. 126), who did not recognize any infraspecific taxa within this species. Petrik-Ott (1979, p. 295) listed

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the record as unverified since she had not examined the specimen. I examined it in 1978, and found it to be the northern var. *pseudopodum*. The collection was made at the southernmost limit of the range in our region. The variety previously was reported from southern Canada south to Virginia, Indiana, Illinois, Nebraska, and California. I have visited the Kansas locality in recent years and, although the habitat is suitable for this plant, the chances are that it is now extirpated. Road construction and housing developments have drastically altered the area since 1929.

KANSAS: Crawford County: Pittsburg, 1 mi W of Broadway, in woods on low, rich slopes and in draws, rare clusters, 15 June 1929, F. A. Riedel s.n. (NY).

Polystichum Ionchitis (L.) Roth.—This collection is a slight southern and eastern range extension from northeastern Wyoming. Both the South Dakota and northeastern Wyoming sites are disjunct from the primary range of this circumboreal species, which lies more than 150 miles to the west and many more miles to the north.

SOUTH DAKOTA: Lawrence County: Black Hills, SW1/4, Sec. 36, T5N, R1E, S of Roughlock Falls, mossy loam underwoods, over talus below limestone bluff, N-facing slope, 22 July 1971, C. A. Taylor, W. Casper & A. Glynn 10918 (SDC).

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REVIEW

"DAS BUCH DER FREILANDFARNE," by R. Maatsch. 196pp. illustr. Paul Parey, Berlin and Hamburg. 1980. ISBN 3-489-61422-4. DM. 68. (ca. \$40.00).— This book is intended for serious hardy fern growers. An introductory portion contains notes on nomenclature, taxonomy, morphology, and fern habitats illustrated with black-and-white photographs and line drawings. About half the book is a useful alphabetical list of fern species and cultivars, concentrating on those grown in Europe, and giving Latin and common names, a brief description of the plant, and other useful notes. The last quarter of the book concerns fern culture. Unusual and helpful information on flowering plants suitable for growing with ferns is included. I hope the publisher will prepare an English edition so that Prof. Maatsch's book receives the wide circulation it deserves in the English-speaking world.—D.B.L.